

## APPENDIX

### **The abstract**

This invention discloses a method for storing an information coded by colors, wherein a correspondent relation is established between the different colors and indicated information, the information is coded by colors, and the code indicated by these colors is directly used as the storage signal stored on a carrier. The invention has merits of the small code bits and simple structure, and can obviously save the storage space. For example, when a true color point is stored by a binary code, the point will be indicated by the binary code of 24 bit length; when the code is stored on an optical disk, it will occupy 24 bit points. But the invention uses only one true color point for recording and storing, the used storage space will be reduced by 24 times.

### **The Claims**

1. A method for storing an information coded by colors, characterized in that a correspondent relation is established between different colors and indicated information, the information is coded by the colors, and the code indicated by the colors is directly used as the storage signal stored on a carrier.

### **The specification**

Title: A Method For Storing An Information Coded By Colors

This invention relates to a method for storing an information coded by colors in an information processing apparatus such as a computer.

At present, the method widely used for the computer information storage is usually: the information is coded by a binary code, and stored on the perforated tape, magnetic disk or optical disk. The method has the following defects: when an indicated object is very complicated, the object will be described by a very long code, so that the storage space is large, the storage and exchange of the information are not easy.

The purpose of the invention is to provide a method for storing an information coded by colors to save the storage space.

Steps of the method are: a correspondent relation is established between the different colors and the indicated information; the information is coded directly by the colors; and the code indicated by the colors is used directly the storage signal stored on a

carrier.

Compared with the prior art, the invention has merits of the small code bits and simple structure, and can obviously save the storage space. For example, when a true color point is stored by a binary code on a digital type optical disk widely used for storing an information, the point will be indicated by the binary code of 24 bit length; when the code is stored on the optical disk, it will occupy 24 bit points (recording units), i.e. 24 binary "pit" and "island". The invention uses only one true color code for recording a true color point, the code will occupy only one bit space on the recording carrier; thus, when the true color data are stored by true color points, the storage space used by the same data amount will be reduced by 24 times compared with the binary. Another example: Chinese words are above 30000, each word will be coded by 16 binary bits. The invention uses 30000 different color points for indicating 30000 words, each point corresponds to a different word; i.e. each word will be indicated only by a color point of a bit, the code length is 1/16 of the binary code length, the occupied storage space is 1/16 of the binary code space.

#### Embodiments of the invention

According to the present technical conditions, equipments required for performing the invention are a computer, a color scanner, a color printer, and correspondent software. The performed method and process are as follows. When coding, 30000 different color points are used for corresponding one by one to the 30000 Chinese words; words in an article are converted into the correspondent color points by a conversion software according to the predetermined one by one correspondent relation; color points are printed on a paper or plastic card by a color printer to obtain the card having the color points wherein each point corresponds to or represents a word; when using the card, color points on the card (or information card) are scanned/identified by a color scanner; color values of color points obtained from the scanner are inversely converted by a software through said one by one correspondent relation to obtain the word information represented by each color point.

Moreover, the invention is not limited to a Chinese word corresponding to a color point, i.e. a Chinese word can correspond to a color code consisting of a plurality of color points. When coding the voices, different voices can be coded by different correspondent colors, and the color codes representing the voices are printed on the storage carrier. When coding the images, the images are coded directly by colors of pixels in the images, or coded by several different colors to represent the colors in the images; then the color codes representing the images are printed on the storage carrier.

Color values of the color points may be deflected or changed by different technical performances of equipments such as printer and scanner when performing the steps such as printing and scanning of the method. Thus, color checking bits or color positioning bits are set up in the information card. That is to say, the color values of color points are constant (such as red, yellow, green) in the specified positions such as three former bits of the document. Therefore, after different scanners scan the three former bits (i.e. three former color points) of the information card, color values of the three color points are compared with color values of the standard red, yellow, green colors. If being different, then calculating the error value or error coefficient. Color values of the latter color points are adjusted or corrected by the error value to obtain the correct information.